## HEARING AID COMPATIBILITY ACT OF 1988

JUNE 7, 1988.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. DINGELL, from the Committee on Energy and Commerce, submitted the following

# REPORT

[To accompany H.R. 2213]

[Including cost estimate of the Congressional Budget Office]

The Committee on Energy and Commerce, to whom was referred the bill (H.R. 2213) to require certain telephones to be hearing aid compatible, having considered the same, report favorably thereon with an amendment and recommend that the bill as amended do pass.

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The amendment is as follows:

Strike out all after the enacting clause and insert in lieu thereof the following:

#### SECTION 1. SHORT TITLE.

This Act may be cited as the "Hearing Aid Compatibility Act of 1988".

#### SEC. 2. FINDINGS.

The Congress finds that—

- (1) to the fullest extent made possible by technology and medical science, hearing-impaired persons should have equal access to the national telecommunications newtwork;
- (2) present technology provides effective coupling of telephones to hearing aids used by some severely hearing-impaired persons for communicating by voice telephone;

(3) anticipated improvements in both telephone and hearing aid technologies

promise greater access in the future; and

(4) universal telephone service for hearing-impaired persons will lead to greater employment opportunities and increased productivity.

#### SEC. 1. AMENDMENTS.

(a) Hearing Aid Compatibility Requirements.—Subsection (b) of section 710 of the Communications Act of 1934 (47 U.S.C. 610(b)) is amended to read as follows: "(b)(1) Except as provided in paragraphs (2) and (3), the Commission shall require

"(A) all essential telephones, and

"(B) all telephones manufactured in the United States (other than for export), or imported for use in the United States, more than one year after the date of enactment of the Hearing Aid Compatibility Act of 1988,

provide internal means for effective use with hearing aids that are designed to be compatible with telephones which meet established technical standards for hearing

aid compatibility.

- "(2) The initial regulations prescribed by the Commission under paragraph (1) of this subsection after the date of enactment of the Hearing Aid Compatibility Act of 1988 shall exempt from the requirements established pursuant to paragraph (1)(B) of this subsection only-
  - '(A) telephones used with public mobile services; "(B) telephones used with private radio services;

"(C) cordless telephones; and

"(D) secure telephones.

The exemption provided by such regulations to cordless telephones shall not apply with respect to cordless telephones manufactured or imported more than 3 years

after the date of enactment of the Hearing Aid Compatibility Act of 1988.

"(8) The Commission may, upon the application of any interested person, initiate a proceeding to waive the requirements of paragraph (1)(B) of this subsection with respect to terminal equipment associated with a new technology or service. The Commission shall not grant such a waiver unless the Commission determines, on the basis of evidence in the record of such proceeding, that such technology or service is in the public interest, and that (A) compliance with the requirements of paragraph (1)(B) is technologically infeasible, or (B) compliance with such requirements would increase the costs of the technology or service to such an extent that the technology or service could not be successfully marketed. In any proceeding under this paragraph to grant a waiver from the requirements of paragraph (1)(B), the Commission shall consider the effect on hearing-impaired individuals of granting the waiver. The Commission shall periodically review and determine the continuing need for any waiver granted pursuant to this paragraph.

"(4) For purposes of this subsection—

"(A) the term 'essential telephones' means only coin-operated telephones, tele-

phones provided for emergency use, and other telephones frequently needed for use by persons using such hearing aids;

"(B) the term 'public mobile services' means air-to-ground radiotelephone services, cellular radio telecommunications services, offshore radio, rural radio service, public land mobile telephone service, and other common carrier radio communication services covered by part 22 of title 47 of the Code of Federal Regulations;

"(C) the term 'private radio services' means private land mobile radio services and other communications services characterized by the Commission in its rules as private radio services; and

"(D) the term 'secure telephones' means telephones that are approved by the United States Government for the transmission of classified or sensitive voice

communications."

(b) Conforming Amendment.—Section 710(f) of the Communications Act of 1934 is amended by striking out the second sentence and inserting the following: "The Commission shall complete rulemaking actions required to implement the amendments made by the Hearing Aid Compatibility Act of 1988 within 9 months after the date of enactment of such Act. Thereafter, the Commission shall periodically review the regulations established pursuant to this section."

## PURPOSE AND SUMMARY

The purpose of this bill (H.R. 2213) is to amend section 710 of the Communications Act of 1934 (47 U.S.C. 610), the Telecommunications for the Disabled Act of 1982, to require that all telephones, except for certain enumerated exceptions, manufactured or imported one year after enactment be hearing aid compatible. The telephone is a major and indispensible part in the business and social lives of all Americans. Yet, although technology makes use of the telephone by the hearing impaired possible, there are still many telephones which the hearing impaired cannot use. The Hearing Aid Compatibility Act of 1988 will allow the hearing impaired to eventually use virtually every telephone. H.R. 2213 was introduced on April 29, 1987 by Congressman Mavroules for himself and 39 other original cosponsors.

## BACKGROUND AND NEED

Since Alexander Graham Bell invented the telephone over 100 years ago it has grown from a new invention into an integral part of our daily lives. The telephone has become a necessity in almost every facet of modern society. But for many of the nation's more than 4,000,000 hearing impaired persons, the telephone is often difficult or impossible to use. Since the United States population is aging, with the percentage of persons sixty-five and older increasing, the number of hearing impaired persons is expected to increase as well, intensifying the need for this legislation.

Our nation's public policy goal is equal, universal telephone service for all Americans. This legislation endeavors to ensure that all hearing impaired persons will have complete access to the telephone network. The Committee intends this legislation to benefit those individuals who rely on hearing aids to use the telephone.

## PROBLEMS ENCOUNTERED BY THE HEARING IMPAIRED

While sign language and lip reading have improved face to face communication for many hearing impaired persons, the problem of the telephone is not fully solved. A telephone placed up against a hearing aid microphone often will create an intolerable and painful feedback squeal which makes use impossible. This is especially true for severely impaired persons who must keep the microphone volume in their hearing aid high.

Thanks to the efforts of advocacy groups such as Organization for Use of the Telephone (OUT) and the research and development of companies such as the American Telephone and Telegraph (AT&T) Special Needs Center, more and more hearing impaired persons are gaining access to the telephone. The Committee notes that the nation's telephone companies have historically gone to substantial lengths to accommodate the needs of the physically impaired. Over the years they have demonstrated a particular commitment to providing the best possible service to the disabled, often at minimal or no cost to the disabled consumer.

A technology available since 1945 known as inductive coupling has allowed many severely hearing impaired persons to use the phone. In fact, many hearing impaired individuals can only use the telephone handset to a hearing aid via an electromagnetic field that is created between the telephone and the aid. Coils located in both the earpiece and the hearing aid create this transmission. This is a completely electronic, not audio, transmission. The advantage of induction is that unlike audio coupling, there is no actual sound to create the feedback squeal.

In 1950 AT&T introduced its U type telephone receiver which was hearing aid compatible. Many hearing aid manufacturers began to equip their aids with a telecoil switch. If the user was engaging in face to face conversation he/she would turn on the microphone and amplifier, but if the user wanted to use the telephone, the user could flip the switch to telecoil and take advantage of the induction transmission. It is important to note that when the aid is on telecoil the user cannot hear any outside noise because the microphone is off.

#### HEARING AID USAGE IN THE UNITED STATES

Each year there are over 25,000,000 residential telephones sold in the United States. According to estimates supplied by OUT and others, approximately 25 percent of the telephones sold in the United States are incompatible with telecoil hearing aids. Although exact records of the percentage of incompatible telephones in the imbedded base are not kept, all estimates indicate that since the deregulation of customer-premise equipment and the divestiture of AT&T, the percentage of incompatible telephones has been increasing. This is partially a result of the recent large influx of lower quality, imported telephones often distributed by providers, some of whom have not continued the long-held practices of AT&T, GTE and others to promote compatible telephones. It is ironic that these landmark decisions which were supposed to led to better and less expensive telephone service for all Americans have made it more difficult for many hearing impaired persons to use the telephone.

Today, there are over four million hearing aid users in this country, approximately one half of whom use telecoil aids. Experts say that there are an additional five to ten million people who experience some form of latent hearing impairment. Each aid lasts approximately five years, and one third of the users use an aid in both ears. According to industry sources, over eight million hearing aids have been sold since 1980. Hearing aid sales and use have

<sup>&</sup>lt;sup>1</sup> Audio coupling is the process of sound traveling from the telephone earpiece to a microphone in the hearing aid just as the sound travels from the telephone earpiece to a non-hearing impaired person's ear.

been increasing steadily in recent years. Annual sales have increased over 90 percent since 1980. In 1987, over 1.4 million hearing aids were sold.

## HEARING AID SALES IN THE UNITED STATES<sup>1</sup>

	Total sales	Percent increase
fear:		
1980	736,642	
1981	834,201	13.2
1982	854,485	2.0
1983	1.029,680	20.4
1984	1,102,887	7.1
1985	1,136,864	3.0
1986	1,268,142	11.5
1987	1,403,489	10.6
Total	8,366,390	90.5

<sup>&</sup>lt;sup>1</sup> Hearing Industries Association Statistical Report.

There are two types of hearing aids which account for a majority of the hearing aids being used today, behind the ear aids and inthe-ear aids. These two types of aids composed 96 percent of the market in 1986.<sup>2</sup> Other types, such as eyeglass or body aids, have become virtually nonexistent. Telecoil aid sales have remained consistent in recent years—374,000 in 1986.<sup>3</sup> Currently, telecoil aids constitute twenty-five to thirty percent of total sales. There are approximately two million people who presently depend upon telecoil hearing aids.

#### HISTORY

After the discovery of induction, many of the telephones manufactured in the United States were compatible, including virtually all those produced by AT&T, the primary provider of telephones in the United States. With the deregulation of telephone equipment and the divestiture of AT&T, some of the new entrants in the market began manufacturing telephones without copper coils needed for compatibility.

Similarly, much of the world was addressing the problems associated with telephone hearing aid compatibility. In the mid-1970's, Bell Canada joined with over twenty interested organizations to examine the issue and in 1980 agreed to use only compatible phones. The Netherlands also requires all telephones to be compatible. In 1985, in order to establish a worldwide compatibility standard, the International Telephone and Telegraph Consultative Committee (CCITT) adopted a worldwide standard for electromagnetic field strength.

The 97th Congress took an important step towards the goal of equal access for the hearing impaired by passing The Telecommunications for the Disabled Act of 1982. This Act required that all "essential telephones" be hearing aid compatible. The 1982 Act de-

Comments of Self Help for the Hard of Hearing, FCC Common Carrier dkt 87-124, June 29, 1987, p. 19.
 Organization for Use of the Telephone Fact Sheet.

fined "essential telephones" as coin operated telephones, emergency telephones, and telephones frequently needed by the hearing impaired.

Pursuant to the 1982 Act, the Federal Communications Commission (FCC) promulgated regulations defining "essential telephones". The definition included all coin telephones in any public or semi-public location, any telephone provided for emergency use such as telephones in elevators, tunnels, on highways, new telephones in hospitals or nursing homes, and any telephone needed to signal a life threatening emergency. In addition, one telephone in every group of credit card telephones must be compatible, as must ten percent of all new hotel room phones. Finally, an employer must provide any employee who requests one with a compatible phone.

In order to guarantee that the hearing impaired could determine exactly which telephones were compatible and thus have access to their own phone, the Act also mandated that the Federal Communications Commission (FCC) establish requirements for the labeling of packaging material. This was needed to provide adquate information to consumers on the compatibility between telephones and

hearing aids.6

The FCC recently conducted an examination to see if the present regulations were sufficient to meet the needs of the hearing impaired. In their rulemaking, the Commision looked into such issues as requiring compatibility for all telephones, the establishment of new compatibility standards and the possible effects of further regulation on cost and progress in the telephone industry. The Commission announced the results of its inquiry at its March 24, 1988 meeting. The Commission proposed expanding its definition of "essential telephones" to include all credit card operated telephones and telephones located in the common areas in a hearing impaired person's workplace. The FCC also asked for specific proposal on implementing an interstate relay system for users of Telecommunications Devices for the Deaf (TDDs).7 After consideration the Commission determined, in what it characterized as a close call, that universal compatibility should not be mandated at this time. Although this decision could have gone either way, the Commission chose to stop short of requiring complete compatibility. The Committee believes that the Commission failed to fully recognize the need for and benefit of full universal compatibility.

The 1982 Act increased telephone access for the hearing impaired, but it did not guarantee the nation's hearing impaired complete access to the telephone network. Universal compatibility and equal access by the hearing impaired to the telephone network follow from the Communications Act of 1934 which states that the Commission should, "make available, so far as possible, to all the people of the United States \* \* \* communication service." Advances in technology have made communication possible and it is time that hearing impaired persons are included in "all the people."

The Telecommunications for the Disabled Act of 1982, Public Law 97-410.
 47 C.F.R. section 68.112.

The Telecommunications for the Disabled Act of 1982, Public Law 97-410.
 FCC Common Carrier dkt. no. 87-124; FCC 88-123, April 15, 1988.

Without equal access the hearing impaired are put at a significant disadvantage. Not being able to use the telephone could severely limit the hearing impaired. The inability to use all telephones imposes social and economic costs on not only the hearing impaired, but the whole nation. Without passage of this bill there will still be many situations where hearing impaired persons are limited because of their inability to use the phone. The hearing impaired should have access to every telephone like the non-hearing

impaired.

In each Congress since 1985 a widely supported bill has been introduced that would require all telephones to be hearing aid compatible. In the 99th Congress the Senate passed a compatibility Act as part of the Continuing Resolution, but it was not included in the Conference report. In this Congress, in an effort to create effective and fair legislation and to address concerns raised by various affected parties, the Committee has met with and had input from Congressman Mayroules and Senator Pressler, the Commission, advocacy groups such as OUT, the American Association of Retired Persons, and Self Help for the Hard of Hearing, various telephone manufacturing industry leaders (including AT&T, GTE, and the Electronic Industries Association) and experts from the National Center for Law and the Deaf at Gallaudet University. As a result, an amendment in the nature of a substitute was adopted by the Subcommittee on Telecommunications and Finance. The amended version has a more efficient enforcement mechanism and affords the telephone industry the flexibility it needs. Nonetheless, the intent of the bill remains the same: to provide complete and equal access for the hearing impaired to the telephone network.

## THE COSTS OF COMPATIBILITY

A universal compatibility requirement will not significantly increase the costs of telephone equipment. Compatibility will increase the production costs of telephones by no more than one dollar per phone. Many major equipment manufacturers, including AT&T and GTE, manufacture and market only hearing aid compatible equipment. These manufacturers are able to do so with negligible costs and no adverse affects on their competitiveness. At the Subcommittee on Telecommunications and Finance hearing on H.R. 2213, Freeman Robinson of GTE testified that the consumer telephone market is too competitive to pass these costs onto consumers.

The law only applies to new telephones. The bill does not require any existing telephones to be retrofitted—in fact, present law prevents the FCC from requiring retrofitting of telephones other than emergency telephones. The law does not require that existing incompatible telephones be made compatible. The manufacturing requirement does not take effect until one year after the bill is enacted and at least three months after the Commission issues its rules. This is to ensure that any telephones presently being manufactured or on order will still be able to be sold.

In 1985, in a response to a letter from Congressman Mavroules and Senator Pressler, then Undersecretary of Commerce Bruce Smart stated that hearing aid compatible telephones were no more

expensive to manufacture than non-compatible phones. In a footnote to GTE's filing before the Commission in the hearing aid rulemaking, GTE said that if compatibility was required by law, compatible telephones might actually become less expensive to produce than incompatible telephones because of the increased economies of scale 8

#### TELEPHONE TECHNOLOGY

Any time the Congress requires any product to meet certain specifications, it is important that the law does not tie manufacturers to a particular technology or method of production. Freedom to develop new products and technologies is essential. The hearing aid bill will not freeze today's technology and inhibit future development. The bill only requires that telephones be compatible; it does not mandate any particular type of technology. Induction coupling and electromagnetic fields are not even mentioned. Section 710 presently states that the "Commission shall ensure that regulations adopted to implement this section encourage the use of currently available technology and do not discourage or impair the development of improved technology." This bill does not change this. In its filing, GTE stated that requiring universal compatibility will not hinder future technological advancement.9

Furthermore, the bill provides for an exemption for new technology. Subsection (3) allows the FCC to exempt a new technology or service if the developer can demonstrate that compatibility is either technologically infeasible or so cost ineffective that it would prevent the product from coming to market. Products and services that cannot be made hearing aid compatible will not have to be

compatible. Technology will not be frozen.

## HRARING AID TECHNOLOGY

This legislation is vital to the communications needs of the hearing imparied. Even though the percentage of hearing aid users that use telecoil aids has declined, telecoil use has remained constant in absolute terms. There are still over two million telecoil users. In 1982, when President Reagan let it be known that he wore a hearing aid, hearing aid usage increased dramatically (see table, p. 5). It was no longer a badge of shame to use an aid; many people who should have been using an aid and were not, began to use an aid. A majority of these new users were mildly impaired people who had no need for a telecoil. Consequently, telecoil users declined only in percentage terms, not in absolute terms. Advances in technology may increase telecoil use in the near future. Hearing aid manufacturers are presently developing telecoils that will fit into an in the ear aid and still be powerful enough to use.

The AT&T Special Needs Center does produce a portable strap on adapter. This device and similar models sell for between twenty five and seventy five dollars. While this device does allow the telecoil aid user to use an incompatible phone, it is insufficient to completely meet the needs of the hearing impaired. David Saks of Or-

Comments of GTE Corporation in FCC Common Carrier dkt no. 87-124, June 29, 1987, p. 8.
 Comments of GTE Corporation in FCC Common Carrier dkt no. 87-124, June 29, 1987, p. 9.

ganization for Use of the Telephone testified that the adapter is a burden to carry around and is not readily available to all telecoil users since it is marketed as a telephone amplifier, not an inductive coupling device.

#### **EXEMPTIONS**

The legislation includes certain exemptions from the compatibility requirement. Subsection (2) directs the commission to exempt four classes of telephones. The first is for telephones used for public land mobile telephone services. This includes all cellular communications and air-to-ground telephones. The second is for private radio services. The third is an exemption for cordless telephones. The fourth is for secure phones. Subsection (3) authorizes the FCC to exempt new technology.

The reasons for the first three exemptions contained in subsection 2 are twofold. The first is cost. Unlike conventional phones, there is a substantial cost associated with making public land mobile and private radio service compatible. In addition, ambient noises and background fields often associated with mobile tele-

phones make inductive coupling difficult.

production evolution to take place.

There are many compatible cordless telephone models, in fact all cordless telephones manufactured or marketed by GTE are compatible. Yet in 1985, in the same letter in which Undersecretary Smart stated that compatibility was not a problem for corded phones, he failed to make that same assertion about cordless telephones. As cordless telephone production increases and becomes more efficient, economies of scale will reduce the costs of making them hearing aid compatible. The additional time will allow this

The second reason has to do with the nature of mobile and cordless telephones. These telephones are specialized second phones. Cordless telephones are presently compliments, not substitutes, to corded phones. A hearing impaired person presently is not likely to be put at any significant disadvantage because he/she cannot use someone else's cordless or cellular phone. As changes in technology or life-style make these products necessities, the FCC may remove the exemption. The Committee believes that cordless telephones will become more prevalent and will be a commonplace communications device in the near future. At that time the exemption will expire. The three-year delay means compatibility will be required when it is needed by the hearing impaired, not before.

Hearing-aid-compatible telephones create an electronic field around the telephone handset. This field is picked by the telecoil in the hearing aid, but it can also potentially be picked up by other receivers. Given the proper equipment, it is thus very easy to listen in on a compatible phone. The national security implications of this situation are obvious. There are certain telephones which must be secure from outside listeners. Consequently, the bill exempts telephones that are approved by the United States Government for the transmission of classified or sensitive voice communication.

In recent years there has been fantastic growth in telecommunications technology. The Committee does not intend to freeze or inhibit this technological development and growth in the communica-

tions industry. There has to be some provision to allow for changes in the industry. Therefore, the bill contains a new technology exemption. This language allows for technological flexibility while still being true to the original intent of the bill—universal access by the hearing impaired by the nation's telecommunications network.

## HEARINGS

The Committee's Subcommittee on Telecommunications and Finance held 1 day of hearings on H.R. 2213 on February 24, 1988. Testimony was received from 7 witnesses, representing 5 organizations, appearing on three panels.

Panel One: The Honorable Nicholas Mavroules (D-Mass.), U.S.

House of Representatives.

Panel Two: Demonstration of inductive coupling technology by Mr. Stephen Whitesell, Supervisor of Product Standards and Test-

ing, AT&T Consumer Products Laboratory.

Panel Three: Mr. Peter H. Bennett, Staff Vice President, Information and Telecommunications Technologies Group, Electronic Industries Association, Mr. David Saks, Organization for Use of the Telephone, Ms. Karen Peltz Strauss, Supervising Attorney, National Center for Law and the Deaf, and Mr. Freeman Robinson, President, GTE Consumer Communications Products Corporation.

## COMMITTEE CONSIDERATION

On April 28, 1988, the Subcommittee on Telecommunications and Finance met in open session and ordered reported the bill H.R. 2213, as amended by a substitute offered by Subcommittee Chairman Edward J. Markey and Subcommittee Ranking Minority Member, Matthew J. Rinaldo, by voice vote, a quorum being present. On May 18, 1988, the Committee met in open session and ordered reported the bill H.R. 2213, as amended by the Subcommittee, by voice vote, a quorum being present.

## COMMITTEE OVERSIGHT FINDINGS

Pursuant to clause 2(1)(3)(A) of rule XI of the Rules of the House of Representatives, oversight findings have been made by the Committee as set forth in this report.

## COMMITTEE ON GOVERNMENT OPERATIONS

Pursuant to clause 2(1)(3)(D) of rule XI of the House of Representatives, no oversight findings have been submitted to the Committee by the Committee on Government Operations.

## COMMITTEE COST ESTIMATE

In compliance with clause 7(a) of rule XIII of the Rules of the House of Representatives, the Committee believes that the bill will have no budget effect for fiscal year 1989.

## U.S. CONGRESS, CONGRESSIONAL BUDGET OFFICE, Washington, DC, June 6, 1988.

Hon. JOHN D. DINGELL,

Chairman, Committee on Energy and Commerce, U.S. House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has reviewed H.R. 2213, the Hearing Aid Compatibility Act of 1988, as ordered reported by the House Committee on Energy and Commerce,

May 18, 1988.

Based on information from the Federal Communications Commission (FCC), we expect that enactment of H.R. 2213 would not result in significant additional cost to the federal government. The bill would require the FCC to promulgate rules to assure that telephones manufactured or imported into the United States are technologically compatible with hearing aids. Several specific types of telephones would be exempt from this requirement.

No costs would be incurred by State or local governments as a

result of enactment of this bill.

If you wish further details on this estimate, we will be pleased to provide them.

Sincerely,

James L. Blum, Acting Director.

## INFLATIONARY IMPACT STATEMENT

Pursuant to clause 2(1)(4) of rule XI of the Rules of the House of Representatives, the committee makes the following statement with regard to the inflationary impact of the reported bill. The legislation will have no measurable impact on wages and prices in the national economy.

## SECTION-BY-SECTION ANALYSIS

Section 1—Short Title

This section states that this Act may be cited as the "Hearing Aid Compatibility Act of 1988".

# Section 2—Findings

The Congress finds that—

(1) to the fullest extent made possible by technology and medical science, hearing impaired persons should have equal excess to the national telecommunications network;

(2) present technology provides effective coupling of telephones to hearing aids used by some severely hearing-impaired

persons for communicating by voice telephone;

(3) anticipated improvements in both telephone and hearing aid technologies promise greater access in the future; and

(4) universal telephone service for hearing-impaired persons will lead to greater employment opportunties and increased productivity.

Section 3—Amendments to the Telecommunciations for the Disabled Act of 1982

Subsection (a) amends subsection (b) of section 710 of the Communications Act of 1934 (47 U.S.C. 619(b)).

Paragraph (1) of Subsection (b) of the section 710 will now require that, in addition to essential telephones, all telephones, except as provided in paragraphs two and three, be Hearing Aid Compatible.

Paragraph (1)(A) requires that all "essential telephones" be hearing aid compatible. This paragraph incorporates the provisions of the 1982 Act that required certain telephones to be hearing aid compatible. The Committee intends that this section apply to any and all telephones included in the 1982 Act. Under no circumstances may the Commission designate any residential telephone as an essential telephone if the persons who would normally use it are

not hearing impaired.

Paragraph (1)(B) requires that all telephones manufactured or imported for use in the United States be hearing aid compatible. This requirement does not apply to telephones manufactured for export or intended for use outside the United States. The requirement only applies to equipment manufactured or imported one year after enactment. The Committee does not intend to require the retrofitting of any existing incompatible phones. The Committee also does not intend to prevent the sale or distribution of any telephone being manufactured or on order at the time of enactment. The Committee considers one year sufficient time to accomplish this goal. A telephone merchandiser may sell in stock incompatible equipment so long as that equipment was manufactured or imported no later than one year after the date of enactment of the Hearing Aid Compatibility Act of 1988.

The Committee does not intend that the requirements of this Act apply to existing incompatible telephones in use at the time of enactment or rented on a periodic basis. The Committee further does not intend that the Commission require incompatible telephones, which are brought in for repair by the owner to any dealer, electrician, or repairperson, to be hearing aid compatible. The Commission may apply the requirements of this Act to refurbished phones but it is not specifically required to do so. Refurbished telephones are, defined as telephones that are required, cleaned, or given new parts and re-sold in large quantities by established telephone refurbishers and sellers of refurbished equipment. A telephone brought in for repair by the owner and then returned to that same owner after being repaired is not a refurbished phone. The Committee intends that all existing hearing aid compatible telephones repaired or refurbished will continue to be hearing aid compatible after repair or refurbishment.

Paragraph (1) further defines hearing aid compatibility as providing "internal means for effective use with hearing aids that are designed to be compatible with telephones which meet established technical standards for hearing aid compatibility." This definition does not require induction as the sole method of telephone/hearing aid coupling. It is flexible and allows for other methods of compatibility. The Committee requires that in its initial rulemaking pur-

suant to this Act the Commission maintain the existing definition and field strength standards for hearing aid compatibility contained in the Commission's rules.<sup>10</sup>

Paragraph (2) authorizes the Commission to exempt certain classes of telephone equipment from the requirements of paragraph (1)(B). The Act directs the Commission to make these exemptions in its initial rulemaking. The Commission may, in a subsequent rulemaking procedure, repeal an exemption granted pursuant to paragraph (2) of this Act. Any exemption granted pursuant to paragraph (2) applies only to the requirements of paragraph (1)(B), not to paragraph (1)(A). The Commission may not exempt any essential telephone from the requirements of this act.

Paragraph (2)(A) exempts public mobile services. Background ambient noises and magnetic fields associated with mobile communications often interfere with the inductive transmission between the hearing aid and the telephone handset, thus making compatibility

impossible.

Paragraph (2)(B) exempts private radio services for the reasons stated in paragraph (2)(A). The Commission may, in future rule-makings, remove the exemption authorized in paragraphs (2)(A) and (2)(B). In any future reconsideration of this exemption, the Commission shall consider the technological feasibility and cost effectiveness of requiring compatibility and the communications needs of the hearing impaired.

Paragraph (2)(C) exempts cordless telephones for a period of three years from the date of enactment. The Committee finds that at present, cordless telephone are not an essential and commonplace communications tool, but they likely will be in the near future. The Committee also finds that while there is presently a cost to making cordless telephones hearing aid compatible, these costs are rapidly declining and should be minimal within three years from the date of enactment.

Paragraph (2)(D) exempts secure telephones. A hearing aid compatible telephone emits a field which the telecoil hearing aid picks up. A well situated listening device could also pick up this signal. Therefore certain telephones must be exempt to protect the contents of the call. The Committee does recognize and appreciate the measures the National Security Agency has taken to allow the hearing impaired to effectively and securely use secure telephones.

Paragraph (3) allows the FCC to waive the requirements of paragraph (1)(B) for new technologies or services associated with new technologies if compatibility would be technologically infeasible or would increase the cost of the new technology so much as to prevent the product from being successfully marketed. This waiver provision also applies to paragraph (1)(B) only. The Commission may not waive the compatibility requirements for any essential telephone.

Given today's technology, except for those services stated in paragraph (2), it is virtually costless to make all telephones hearing aid compatible. The Committee recognizes, however, that the telecommunications equipment field is developing and expanding at a

<sup>10 47</sup> C.F.R. 68.316.

rapid pace. It is impossible to predict what direction the market will take and what products will be available. In the future, new products and services will be developed which will benefit the American public greatly. It is possible that making a new product will be technologically infeasible or prohibitively expensive. The Committee does not intend to inhibit the growth and development of telecommunications technology.

Any manufacturer seeking a waiver under this section must initiate a proceeding at the FCC. The Committee does not intend this paragraph to be used as a loophole or a blanket exemption from the requirements of the Act. All determinations made by the Commission pursuant to this paragraph shall be based upon the evidence in the record of a waiver proceeding and all such determinations shall be reviewable by the courts of the United States of America.

The Commission shall only grant such a waiver if it determines that the new technology or service is in the public interest and compliance with the requirements of the Act would be technologically infeasible or compliance with the requirements would increase costs of the new technology or service to such an extent that it could not be successfully marketed. The Committee intends that the Commission grant such a waiver only in cases where the product or service cannot be made compatible or in cases where compliance with this Act would make it impossible to produce or sell the product competitively. A waiver should not be granted in cases where compliance would simply be impractical or would add a nominal additional cost to a new technology or service. The Committee hopes that in the instances where compliance is possible, but so cost ineffective as to qualify for a waiver under this paragraph, the manufacturer will make hearing aid compatible models available to those who request it.

In any proceeding to grant a waiver pursuant to this paragraph, the Commission must consider the social and economic effects such a waiver will have on hearing impaired telephone users. The Committee also intends that in deciding whether or not to grant such a waiver, the Commission will take into account what sector and proportion of the general population the new technology or service is intended for. The Committee also recognizes that both telephone and hearing aid technology will advance in the future. Therefore the Commission shall periodically review and determine the continued need for any waiver granted pursuant to this paragraph.

Paragraph (4) defines certain terms contained in the Hearing Aid

Compatibility Act of 1988.

Paragraph (4)(A) defines the term "essential telephone". This is the same definition that is used in the 1982 Act. It includes coin operated telephones, telephones whose primary purpose is to alert the authorities in the event of an emergency, and other telephones frequently needed by the hearing impaired.

The term "coin operated telephone" includes any telephone which is operated with coins located on public property or any semi-public location (such as a restaurant, lobby, gas station, or pri-

vate club).

The definition that the Commission adopts for "Telephones provided for emergency use" must include all telephones which are in-

tended primarily to assist in saving persons from bodily injury, theft, or life threatening situations. The Committee intends that the term be defined to include, but not be limited to telephones in elevators, mine shafts, and any other place where a hearing impaired person might be isolated in the event of an emergency. The term must also include telephones specifically designed to alert the police, fire department, or other emergency authorities. The Commission should also prescribe specific guidelines for telephones provided to avoid life threatening situations in hospitals and other institutions where hearing impaired persons might be confined.

The Committee intends that the Commission employ a common sense approach in determining which telephones are "frequently needed by persons with impaired hearing". The definition should include, but not be limited to, telephones at a hearing impaired person's workstation, all telephones operated by credit card, a reasonable percentage of all telephones located in hotel and motel rooms, and all telephones generally made available to invitees at a place of business.

Paragraph (4)(B) defines the term "public mobile services". The definition includes several examples of public mobile services, but in addition to those mentioned in the Act, it is meant to include any and all services covered by part 22 of title 47 of the Code of

Federal Regulations.

ties who want privacy.

Paragraph (4)(C) defines the term "private radio service" as services characterized as such by the Commission. Private radio services which connect with the public telephone network are covered by this paragraph if the Commission considers such services private radio services.

Paragraph (4)(D) defines the term "secure telephones". The term means only those telephones approved by a duly authorized agency of the United States of America for the transmission of classified or sensitive voice communications. The term is not meant to include telephones not approved by the United States for the transmission of classified or sensitive voice communications used by par-

Subsection (b) of the Hearing Aid Compatibility Act of 1988 is a conforming amendment. This subsection amends Section 710(f) of the Communications Act of 1934 and directs the Commission to complete rulemaking actions needed to implement the amendments made by the 1988 Act within nine months of the date of enactment of such Act. The subsection also directs the Commission to periodically review the regulations established pursuant to this section. In reviewing its regulations the Commission shall assess the

# continued need of any exemption or waiver authorized by this Act. Changes in Existing Law Made by the Bill, as Reported

In compliance with clause 3 of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

# Section 710 of the Communications Act of 1934

## TITLE VII—MISCELLANEOUS PROVISIONS

#### TRUEPHONE SERVICE FOR THE DISABLED

Sec. 710. (a) The Commission shall establish such regulations as are necessary to ensure reasonable access to telephone service by

persons with impaired hearing.

[(b) The Commission shall require that essential telephones provide internal means for effective use with hearing aids that are specially designed for telephone use. For purposes of this subsection, the term "essential telephones" means only coin-operated telephones, telephones provided for emergency use, and other telephones frequently needed for use by persons using such hearing aids.

(b)(1) Except as provided in paragraphs (2) and (3), the Commis-

sion shall require that—

(A) all essential telephones, and

(B) all telephones manufactured in the United States (other than for export), or imported for use in the United States, more than one year after the date of enactment of the Hearing Aid Compatibility Act of 1988,

provide internal means for effective use with hearing aids that are designed to be compatible with telephones which meet established

technical standards for hearing aid compatibility.

(2) The initial regulations prescribed by the Commission under paragraph (1) of this subsection after the date of enactment of the Hearing Aid Compatibility Act of 1988 shall exempt from the requirements established pursuant to paragraph (1)(B) of this subsection only—

(Å) telephones used with public mobile services;

(B) telephones used with private radio services;

(C) cordless telephones; and

(D) secure telephones.

The exemption provided by such regulations to cordless telephones shall not apply with respect to cordless telephones manufactured or imported more than 3 years after the date of enactment of the Hear-

ing Aid Compatibility Act of 1988.

(3) The Commission may, upon the application of any interested person, initiate a proceeding to waive the requirements of paragraph (1)(B) of this subsection with respect to terminal equipment associated with a new technology or service. The Commission shall not grant such a waiver unless the Commission determines, on the basis of evidence in the record of such proceeding, that such technology or service is in the public interest, and that (A) compliance with the requirements of paragraph (1)(B) is technologically infeasible, or (B) compliance with such requirements would increase the costs of the technology or service to such an extent that the technology or service to such an extent that the technology or service to such an extent that the technology or service fully marketed. In any proceeding under this paragraph to grant a waiver from the requirements of paragraph (1)(B), the Commission shall consider the effect of hearing-impaired individuals of granting

the waiver. The Commission shall periodically review and determine the continuing need for any waiver granted pursuant to this paragraph.

(4) For purposes of this subsection—

(A) the term "essential telephones" means only coin-operated telephones, telephones provided for emergency use, and other telephones frequently needed for use by persons using such hear-

ing aids;

(B) the term "public mobile services" means air-to-ground radiotelephone services, cellular radio telecommunications services, offshore radio, rural radio service, public land mobile telephone service, and other common carrier radion communication services covered by part 22 of title 47 of the Code of Federal Regulations:

(C) the term "private radio services" means private land mobile radio services and other communications services characterized by the Commission in its rules as private radio serv-

ices; and

(D) the term "secure telephones" means telephones that are approved by the United States Government for the transmission of classified or sensitive voice communications.

(f) The Commission shall complete rulemaking actions required by this section and issue specific and detailed rules and regulations resulting therefrom within one year after the date of enactment of the Telecommunications for the Disabled Act of 1982 [Thereafter the Commission shall periodically review such rules and regulations.] The Commission shall complete rulemaking actions required to implement the amendments made by the Hearing Aid Compatibility Act of 1988 within 9 months after the date of enactment of such Act. Thereafter, the Commission shall periodically review the regulations established pursuant to this section. Except for coin-operated telephones and telephones provided for emergency use, the commission may not require the retrofitting of equipment to achieve the purposes of this section.